

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 20, lines 19 and 20 with the following amended paragraph:

In various embodiments, the thickness of the composite layer 34 may be increased to increase the stiffness of the boom sections 22. Additionally, stiffening layers 34C, 34D, 34E and 34F can be secured to each of the steel plates 42A-42D of the boom section 22, as illustrated schematically in Figure 10. Once again, the placement of the stiffening layers 34 and the direction of fibers 46 within each stiffening layer 34 determines the direction upon which strength is provided to the boom section 22. If a layer having generally longitudinal fibers 46A is mounted to the top plate 42A (as shown by the composite stiffening layer 34C), the boom section 22 is able to better withstand applied forces which bend the boom section 22 about a horizontal axis 60 (such as by loads attached to the boom system 12, or by the weight of the boom sections 22 themselves). If a layer having generally longitudinal fibers 46B is mounted to the side plate 42B (as shown by the composite stiffening layer 34D), the boom section 22 is better able to withstand forces which bend the boom section 22 about a vertical axis 62 (such as may occur when the boom section contacts an external object). Additionally, the direction which the fibers 46 are run in the stiffening layers 34 can affect the type of force which can be withstood. For example, if a layer having fibers 46C running transversely is mounted to side plate 42D; (as shown by composite stiffening layer 34F) allows the boom section 22 to better withstand shear forces. Thus, depending upon the type of application the boom section 22 is used in, various fiber 46 directions can be used to provide customized strength.

Please replace the paragraph at page 21, line 20 with the following amended paragraph:

Lightweight composite boom sections 22 may be used to extend the vertical and/or horizontal reach of conveying boom systems 12 past that of prior art metal boom systems utilizing

similarly sized steel boom sections 22. The boom system 12 is cantilevered, so that each intervening boom section 22 (e.g., middle boom section 22B) supports the weight of the more distal boom sections (e.g., middle boom section 22B supports the end boom section 22C, and base boom section 22A supports the combined loads of middle and end boom sections 22B and 22C). Constructing the boom sections 22 substantially of lightweight composites; reduces the weight added to the total load of the boom system 12 by each of the boom sections 22 and allows the boom system 12 to be built with a greater vertical and/or horizontal reach.